

An analysis of Hall effects on the hydromagnetic free convection resulting from the combined effects of thermal and mass diffusion of an electrically-conducting liquid passed an infinite vertical porous plate in a rotating frame of reference is carried out when a strong magnetic field is imposed in a plane which makes an angle α with the normal to the plate. The expressions for the mean velocity, mean temperature in the boundary layer, and the mean skin-friction, the mean rate of heat transfer on the plate are derived. The influence of Hall currents on the flow is studied for various values of α .